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By

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Summary

U.S. economic performance was extraordinary in the 1990s, particularly after 1995. Real GDP grew at 3.6 percent in 1996 and over 4 percent in each year from 1997 to 2000. Growth actually exceeded 6 percent from the middle of 1999 to the middle of 2000. Unemployment reached the 4 percent level and inflation remained restrained, aside from the impact of rising energy prices. A key reason for this strong performance was a shift to faster productivity growth after 1995.

Unfortunately, this recent strong period provides no guarantee of a continuation of economic growth at the same pace in the years to come. On page 28, the January 2001 *Economic Report of the President* states:

> The fact of a shift in the trend of structural productivity growth does not tell us how permanent that shift will turn out to be…..We could be observing not a long-term shift to a faster productivity growth rate but simply a shift to a higher level of productivity, with faster growth for a while followed by a return to the pre-1995 trend.

Over the past 25 years our ability to predict the growth of GDP and to predict the long-term fiscal position of the economy has been poor. An important reason for this is the uncertainty in the productivity trend. Good news about trend productivity not only adds to GDP growth directly, it also generates a virtuous cycle of good news about inflation, unemployment, budget surpluses, interest rates, the stock market, and investment. Once the ball gets rolling it gathers speed. On the down side, the pattern works in reverse. A return to slower productivity would unleash a cycle of problems that could end up eliminating the projected budget surpluses. Slower productivity growth would worsen inflation and weaken the dollar. It would lower real wage growth and trigger a worsening of the wage price spiral. And of course there would be less GDP and less tax revenue.

CBO, in its January *Budget and Economic Outlook*, forecast an on-budget surplus of $3.1 trillion for 2002-2011. Since then a $1.35 trillion dollar tax cut has passed, bringing this projected surplus down to $1.75 trillion. If productivity growth were to be 2.0 percent a year, going forward—slower than CBO's forecast, but still a pretty strong performance--this would reduce the surplus by about $1 trillion, to around $750 billion.

CBO considers a pessimistic scenario with 1.5 percent productivity growth and lower revenue collection (Table 5-3). *In this case the $3.1 trillion on-budget surplus is transformed into a deficit of $525 billion—a $1.88 trillion deficit counting the tax cut.*

I remain optimistic about the economy and believe it reasonable to expect productivity growth of 2 to 2½ percent per year once renewed expansion is underway. But the current risks in the budget forecast are mostly on the downside and sound budget planning should recognize these downside risks and should not use up surpluses we do not know we have and that may never materialize. Maintaining fiscal discipline is a top priority.

Getting Perspective on the New Economy

In the *Economic Report of the President* published in January of this year, we described the extraordinary economy of the 1990s, and particularly the spectacular performance since 1995. Real GDP grew at 3.6 percent in 1996 and over 4 percent in each year from 1997 to 2000. Growth actually exceeded 6 percent from the middle of 1999 to the middle of 2000. Unemployment reached the 4 percent level and inflation remained restrained, aside from the impact of rising energy prices. Chart 1 illustrates.

These indicators of a strong economy had a counterpart in better living standards for Americans. Incomes grew strongly across the board (Chart 2), the poverty rate declined and real wages increased. The 50 percent of so of American families that own stock also saw their wealth increase sharply.

A key reason for this strong performance was the turnaround in productivity growth. After 25 years of rapid growth in output per hour after World War II, the productivity trend slowed sharply after 1973 and remained sluggish through 1995. From 1995 to 2000, a new trend emerged with productivity growing at close to 3 percent a year, signaling to many a return to the strong growth years of the 50s and 60s. An open competitive US economy was taking advantage of new technologies to increase its efficiency, changes described as a "new economy". The rate of productivity growth is a key driver behind GDP growth and increasing living standards.

With the benefit of hindsight, January's *Report* could have been more forceful in saying that the term "new economy" carried with it no guarantee of a continuation of economic growth at the same pace in the years to come. For the careful reader, the qualifications were certainly there. On page 28, for example, the *Report* states:

> The fact of a shift in the trend of structural productivity growth does not tell us how permanent that shift will turn out to be…..We could be observing not a long-term shift to a faster productivity growth rate but simply a shift to a higher level of productivity, with faster growth for a while followed by a return to the pre-1995 trend.

But despite this caveat, the term "new economy" may have conveyed more certainty about the future course of the economy than was justified by the evidence, or intended by our own use of the term.

I am basically optimistic about the future of productivity and growth in the U.S. economy. But enthusiasm for the past performance of the economy and for the continuing changes taking place should not blind us to the considerable uncertainties in forecasting the future, both short term and longer term

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Why is There So Much Uncertainty?

There is a view of the economy that served policymakers well in the past as a guide to economic policymaking. This view was developed by Arthur Okun, in his days with the Kennedy and Johnson Administrations, when he defined "potential GDP" as the level of output characterized by full employment and full utilization of capital, but no excess demand pressure or over use of capital or labor. Potential output grows over time at a rate determined by the trend rate of increase in productivity and the increase in the size of the labor-force. In Okun's time, both the productivity trend and the growth of the labor force were fairly predictable. The point at which labor and capital are fully used was stable. And so potential GDP growth was also seen as predictable.

This view of the economy did not imply that short-term economic forecasting was easy; quite the contrary. In any given year, the actual level of GDP might be above or below potential, depending upon whether demand was stronger or weaker than potential GDP. Considerable experience has shown that predicting the short-term ups and downs of the economy is not something that can be done with any precision. Chart 3, for example, shows the evolution of the Blue Chip consensus forecasts for the growth of GDP in 2001. As late as November 2000, the forecasters were saying that real GDP would grow at 3.4 percent in 2001. In the latest forecast, the consensus is down to 1.8 percent.

This uncertainty about the short term has always made it difficult for the President and the Congress to predict the size of the budget surpluses that would materialize in the coming fiscal year. But in the simple Okun world I have described, uncertainty about the short term did not lead to exploding uncertainty over the longer term. As long as the growth of potential output was predictable, there might be one or two years in which recession resulted in a deficit, but this would then be offset by a year or two of rapid GDP growth when the deficit would shrink or be eliminated. The uncertainties year by year, in this view, were partially offsetting.

Unfortunately, over the past 25 years our ability to predict the growth of potential output and to predict the long-term fiscal position of the economy has not turned out to be good—to put it mildly. Some of this budget uncertainty relates to technical factors like assumptions about growth in health care costs and, most recently, the amount of revenue likely to be generated by each dollar of GDP. And, of course, subsequent legislation alters budget outcomes. But I want to focus in my testimony on the uncertainty in the economics.

Experience since the early 1970s has taught us that, contrary to the simple Okun world, there can be times when the economy does not revert back to prior estimates of its potential GDP. The economy starts to do well and continues to do well, or it starts to do badly and continues to do badly. During the 1990s, and particularly in the second half of the decade, the economic forecasts were consistently on the pessimistic side. We kept thinking that the economy must slow down, bringing GDP back closer to our estimate of the path of potential GDP. And of course, the economy kept growing rapidly.

In earlier periods, the errors were in the opposite direction. We know now that the trend rate of growth of productivity and GDP slowed after 1973. But careful forecasters at the time, thought that potential output growth would return to the more rapid pace it had achieved for the 25 years prior to 1973. The same mistake was made in the 1980s, for a different reason, when over-optimistic projections were made of the supply side effects of tax cuts.

In large part, the reason for these mistakes is the uncertainty in the productivity trend, which makes potential output growth harder to predict than we thought. But the problem is actually more complicated than this. Good news about trend productivity generates a virtuous cycle of good news about inflation, unemployment, budget surpluses, interest rates, the stock market, and investment. Once the ball gets rolling it gathers speed. Faster productivity growth lowers inflation and increases real wage growth. This improves the situation in the labor market and allows the economy to operate for an extended period with lower unemployment and higher GDP. The return to capital investment goes up, encouraging more investment, raising stock market prices and continuing the strong growth.

On the down side, the pattern works in reverse. A return to slower productivity would unleash a cycle of problems that could end up eliminating the projected budget surpluses. Slower productivity growth would worsen inflation and would likely weaken the dollar. It would lower real wage growth and trigger an adverse wage price spiral. And of course there would be less GDP and less tax revenue.

The million dollar question, or, I guess, the trillion dollar question, we face now, therefore, is whether the current slowdown will be brief and followed by a return to rapid growth, or whether we have set off down a path of slower growth and budget weakness.

The Good News Scenario

There is a case to be made that the bad news is mostly behind us. Despite the collapse of technology stocks, the overall stock market has held up pretty well and so has consumption, housing and auto sales. While there are many things I disagree with in the recently passed tax cut legislation, the immediate effect of the tax rebates will be to boost consumption later this year. The worst seems to be over on energy prices and a large part of the inventory adjustment has been completed. Core inflation has increased in the early months of this year, but overall inflationary pressures seem muted.

The likely reasons for faster productivity growth do not seem to have gone away. Intense global competitive pressure keeps companies looking for ways to cut costs and raise productivity. The advances in computing, telecommunications and software are continuing and most of the benefits of the Internet are still in the future.

But I want to caution that there is some bad news about this good news scenario: this is the scenario that is already built into the budget projections. The risks seem to be on the downside. In January, the Congressional Budget Office projected that trend productivity

would grow at 2.7 percent a year. They recognized that the cyclical growth slowdown would result in actual productivity growth below this level, but they still assumed a 2.5 percent growth rate over ten years—basically a continuation of the very strong trend of the late 1990s. In some other respects the CBO was relatively conservative in its economic estimates, so I am not saying that their predictions were out of line with the views of many economists at the time. But based on what we know now, the January estimate of a $3.1 trillion on-budget surplus in the 10-year budget horizon was premised on a continuation of very good economic news. This is reinforced by the fact that CBO is pretty optimistic in its estimates of the revenues to be expected from their economics.

Since their baseline projection was made, a $1.35 trillion tax cut has passed. Other things equal, this will reduce the baseline surplus projection to $1.75 trillion.

Consider now a scenario, based on good news, but not quite such good news. Suppose productivity growth were 2.0 percent over ten years, instead of 2.5 percent. This would reduce real GDP growth and would mean that over the period 2002-2011, the surplus would fall by about a $1 trillion.[1] The ten-year surplus would now be down to around $750 billion. And I am still talking about a good news scenario.

The Bad News Scenario

A specific reason for concern that this optimistic economic and budget outcome will not be achieved is that in the current slowdown investment in high-tech has fallen so hard. Most economists find that a major contributor to the rapid growth of the 1990s was the boom in high-tech investment. The high-tech sector itself contributed directly to faster productivity growth, and the industries buying the equipment were able to increase their productivity. But it looks now as if there was significant over-investment in this area, particularly in telecommunications. The high-tech sector is currently very weak and likely to remain so for a while and we may well not see a resumption of very high levels of investment for a while. Several economic forecasters are lowering their estimates of potential growth because of this fall in investment. Productivity growth was only 1.4 percent a year from 1973 to 1995 and a return to that level is not impossible.

In addition, the unemployment rate is rising and is likely to continue to rise. If productivity weakens, this will raise the possibility of stagflation, just as we saw in the 1970s when productivity slowed. A slowing of productivity means that unit labor costs increase faster, contributing to some combination of higher inflation or higher unemployment. The dashing of expectations about productivity growth would have an adverse effect on the stock market and investment and on consumer confidence and spending.

Finally, there are international trade and currency implications. Many experts believe the current weakness in the Euro is out of line with long run market equilibrium, so some

[1] According Table B-1 of CBO's January Outlook, 0.1 percent slower GDP growth reduces the surplus by $244 billion. A drop of 0.5 percent a year in non farm productivity translates into a decline of about 0.425 percent a year in GDP growth. $244 billion multiplied by 4.25 yields about $1 trillion.

adjustment of the exchange rate to the dollar would be appropriate. But a sudden loss of confidence in the U.S. economy could trigger a rapid decline in the dollar and perhaps an overshooting in which the dollar falls below its equilibrium level, which would exacerbate inflation.

In short, if things start to go badly, there may be not just a minor shortfall in the budget estimates, there could be a major shortfall. In January, CBO reported a pessimistic scenario with 1.5 percent productivity growth and lower revenue collection per dollar of GDP (Table 5-3). *In this scenario the $3.1 trillion on-budget surplus 2002-2011 is transformed into a deficit of $525 billion—a $1.88 trillion deficit counting the tax cut.* This amount of downside risk in the forecast is certainly not out of the question.

Conclusions for Budget Policy

In previous testimony I have outlined my reasons for favoring fiscal discipline over large tax cuts.[2] First, if large on-budget surpluses do materialize, they should be used in part to address the long run deficit problems of Social Security and Medicare. The long run fiscal position of the federal government is not good, given that the baby boomers will soon be moving into retirement. Second, a large tax cut is particularly bad policy at a time when the United States is running a current account deficit equal to about 4 ½ percent of GDP. We need to increase national saving, not decrease it over the next ten years. Third, while a stimulus to the economy is fine now, it will not be fine later. A tax cut shifts the mix of monetary and fiscal policy, raises interest rates, discourages housing and dampens investment and productivity growth. Fourth, the new economy emerged at a time of extraordinary fiscal discipline. Fiscal discipline did not create the new economy but it helped start the virtuous cycle going. Why change now? Fifth, the surplus projections, based on existing policy, may not be realistic on the spending side. Both parties agree that Federal spending should be controlled, but both parties also agree on the importance of a strong national defense and social investments in health, education and the environment. Spending over the next ten years may continue to decline as a share of GDP, but probably not as fast as assumed in the budget projections.

My testimony today has focused on economic uncertainty. There is always great uncertainty about the path of the economy over ten years and today we face unusual uncertainty as we wait to find out more about the durability of the acceleration of productivity and GDP growth that took place in the latter 90s. I remain optimistic about the economy and look forward to productivity growth of 2 to 2 ½ percent a year once recovery is underway. But the current risks in the budget forecast are mostly on the downside and sound budget planning should recognize these downside risks and should not use up surpluses we do not know we have and that may never materialize.

[2] Testimony prepared for the Subcommittee on Domestic Monetary Policy, Technology and Economic Growth of the U.S. House of Representatives Committee on Financial Services, March 29, 2001

Addendum: The Nature of the Recent Growth Slowdown

We are probably not currently in a recession, and there is a good chance recession will be avoided, as a result of the sound fundamentals of the economy and the prompt and effective actions of the Federal Reserve. Even without recession, however, this has been a pretty dramatic period of slowdown. Table 1 reports the extent of the declines in the rates of growth that took place in the previous postwar recessions and includes the current slowdown. The rate of economic growth prior to this slowdown was faster than the period leading up to any previous postwar recession. And the drop in the growth rate, at 4.6 percentage points is larger than occurred in many recessions. This has been a big shock to the economy, including the financial system.[3]

What have been the sources of the slowdown, compared to previous episodes? Table 2 shows, for each episode, the percentage of the decline in growth shown in Table 1 that was due to declines in the growth of inventory investment, equipment investment and so on.[4] Compared with the average of all postwar cycles, the current slowdown is not atypical. Inventories, equipment investment, and consumption all make substantial contributions. Since imports fall in a downturn, the net export component tends to support growth, hence the negative sign.

The surprising features of the current slowdown are, first, that inventories are playing a big role, despite improved inventory management methods. The new tools and techniques did not stop U.S. businesses from being caught with excess inventories. In fact the improved speed of communication in the economy may have encouraged a speed-up in the adjustment of inventories. Second, equipment investment played a much bigger role in the recent slowing of growth than in the typical recession of the past thirty years. This part of GDP had become much more stable since the 1950s and 1960s. The current investment slump is a hangover from the investment boom, including some over-investment, during the period of rapid growth. Third, other investment has held up very well. The housing sector responds to interest rates, and it slumped in early 2000 when rates were rising. Following the Fed actions to cut interest rates, the housing sector picked up, providing a buffer against the impact of the depressed manufacturing sector.

[3] The growth slowdown is defined as the average annual rate of GDP growth over the three quarters following the cyclical peak compared to the growth over the four quarters up to and including the peak. For the current slowdown the "peak" is taken as the second quarter of 2000.

[4] The average contribution of each element of GDP to growth (reported quarterly by the Bureau of Economic Analysis) is computed for the three quarters after the peak and the four quarters up to the peak. The difference in contribution expressed as a percentage of the slowdown shown in Table 1, reflects the impact of each element of GDP to the overall slowdown. Aside from rounding errors, the contributions sum to 100 percent.

Table 1: Magnitude of Economic Slowdown

	Growth Rate Up to Peak [a]	*Growth Rate After Peak* [b]	*Difference*
1948-IV	3.7	-0.7	4.3
1953-III	5.6	-2.6	8.1
1957-III	3.1	-4.0	7.1
1960-II	2.1	-0.7	2.7
1969-IV	1.9	1.3	0.7
1973-IV	4.1	-2.1	6.2
1980-I	1.5	-0.4	1.9
1981-III	4.4	-3.1	7.5
1990-III	1.7	-1.0	2.6
2000-II	6.1	1.5	4.6

a Average annual growth rate for peak quarter and three preceding quarters

b Average annual growth rate for three quarters following the peak quarter

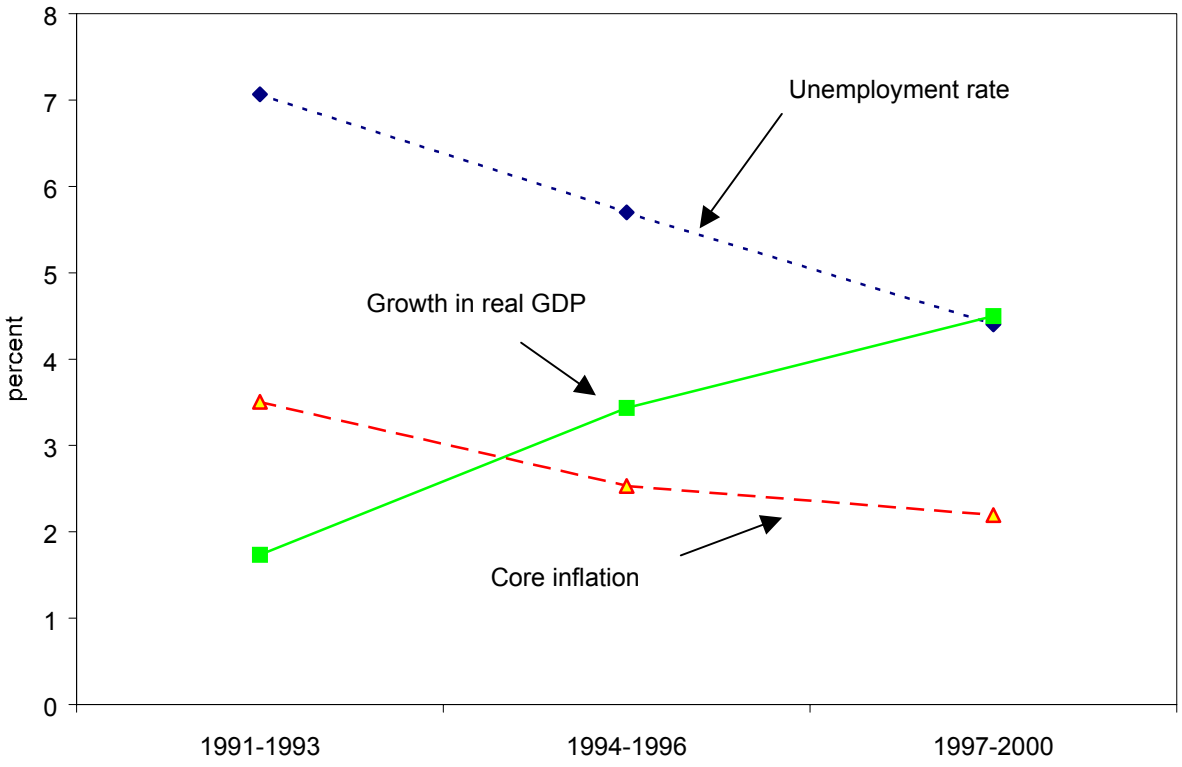
Source: Bureau of Economic Analysis, authors' analysis

Table 2: Percent Contribution to the Growth Slowdown

	Inventories	*Equipment & Software*	*Other Investment*	*Private Consumption*	*Net Exports*	*Government Consumption*
1948-IV	89.2	37.8	11.1	13.7	-55.5	3.1
1953-III	11.1	24.6	-1.6	31.4	-8.3	42.4
1957-III	22.8	26.5	2.4	30.1	18.4	-0.2
1960-II	16.0	46.0	-9.8	88.3	5.1	-45.1
1969-IV	11.5	64.7	22.7	27.1	-21.4	0.6
1973-IV	44.1	13.3	15.5	19.5	15.2	-7.7
1980-I	-2.4	28.7	13.0	34.2	-27.1	53.7
1981-III	60.7	16.5	16.3	17.4	-10.1	-1.0
1990-III	41.2	7.9	25.2	66.6	-40.8	-0.2
2000-II	43.4	34.2	-0.8	30.4	-16.0	8.5
Average	33.8	30.0	9.4	35.9	-14.1	5.4
Median	32.0	27.6	12.0	30.3	-13.1	0.2

Source: Bureau of Economic Analysis, authors' analysis.

Chart 1: GDP growth, Unemployment rate,
and Core inflation 1991-2000

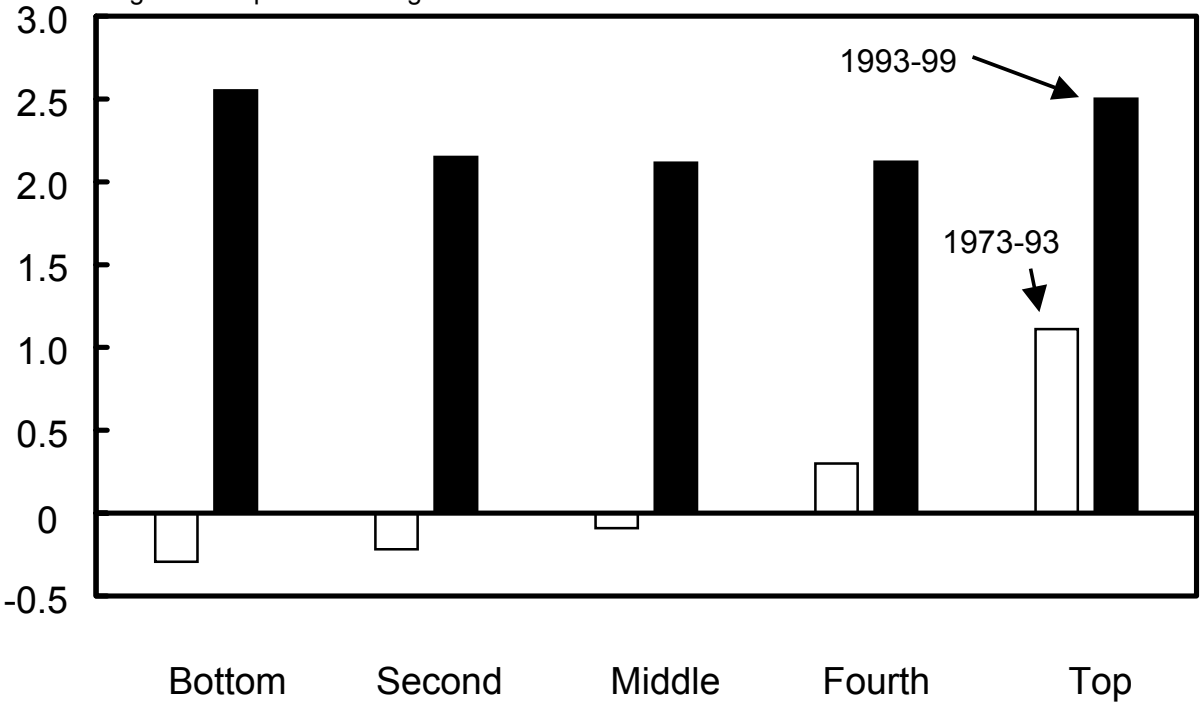


Note: Real GDP growth is deflated by the chained 1996 dollars deflator. Inflation is derived from CPI-U-RS (less food and energy). Unemployment rate is for the civilian population.

Growth in household income since 1993 has been both stronger and more equally distributed than it was over the previous 20 years.

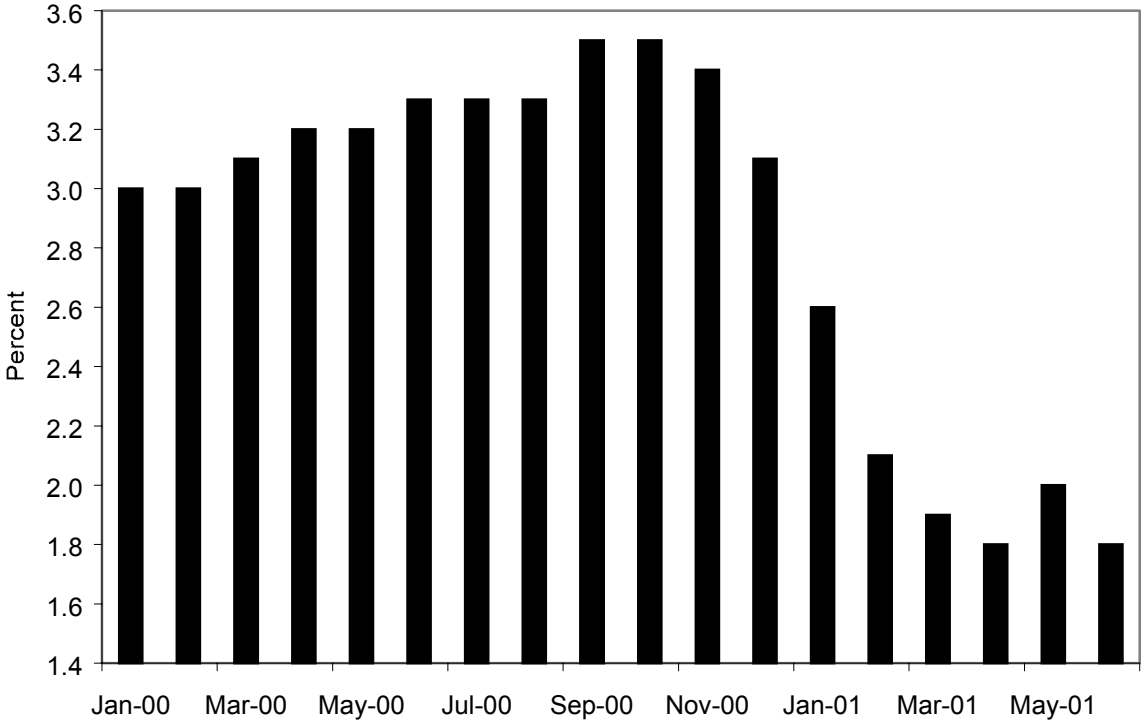
Chart 2: Growth in Real Household Income by Quintile, 1973-93 and 1993-99

Average annual percent change



Sources: Bureau of Economic Analysis and Bureau of Labor Statistics.
Source: Department of Commerce (Bureau of Labor Statistics). Chart reproduced from Economic Report of the President 2001.

Chart 3: Changes in Consensus Forecasts of
Real GDP Gowth for 2001



Source: Blue Chip Economic Indicators, June 10, 2001